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REMARKS

1. In the above-captioned Office Action, the Examiner objected to the specification, the Abstract, and claim 7, for informalities. The drawings were objected to. Claims 1, 3, 4, 6, 7, 9, 10, 12, and 15 were rejected under 35 U.S.C. §102(e) in view of Gray Jr. (U.S. Patent No. 6,651,432). Claims 2 and 8 were rejected under 35 U.S.C. §103(a) given Gray in view of Kawasaki (Publication No. US 2001/00477798 A1). Claims 4 and 10 were rejected under 35 U.S.C. §103(a) given Gray in view of Gorel et al. (U.S. Patent No. 6,301,887). Claim 13 was rejected under 35 U.S.C. §103(a) given Gray in view of Design Choice. These rejections are traversed and reconsideration is hereby respectfully requested.

2. The Examiner objected to the specification, paragraphs [0002] and [0003], to the Abstract, and to claim 7, for informalities. The specification and claim 7 are amended above, and a substitute Abstract is provided above that comply with the Examiner's recommendations. Removal of the objections pertaining to these items is respectfully requested.

3. The Examiner objected to the drawings because the Examiner stated that the limitation that "the throttle valve is placed in the undercarriage outside and rearward of the engine compartment" is not shown in the drawings.

Applicant would like to call the Examiner's attention to FIG. 1 of the application as filed, showing a general schematic diagram of an engine system embodying principles of the present invention, and to paragraph [0027] of the specification.

FIG. 1 shows the throttle valve 36 connected between the CPDF 34 and the muffler 38. Claim 13 establishes that a motor vehicle has *an engine compartment at the front of the vehicle and an undercarriage extending rearward from the engine compartment*. The engine 22 is in the engine compartment.

As Applicant states in paragraph [0027] of the specification, the CPDF 34 and muffler 38 "can be packaged in a motor vehicle outside of the vehicle engine compartment, such as in the exhaust system downstream of all exhaust after-treatments and upstream of the muffler ... in the undercarriage of the vehicle" (paragraph [0027], lines 4-8).

Therefore, FIG. 1 shows a CPDF 34 and a muffler 38 that are described as being placed on an undercarriage of a vehicle and the throttle valve 36 is shown connected between those components in the undercarriage of the vehicle as claimed. The claimed limitation objected to by the Examiner is adequately shown in FIG. 1. Moreover, a person skilled in the art would be able to comprehend the claimed limitation.

4. Claims 1, 3, 4, 6, 7, 9, 10, 12, and 15 were rejected under 35 U.S.C. §102(e) in view of Gray. Prior to discussing the merits of the Examiner's position, the applicant believes it would be helpful to first briefly describe and characterize the Gray reference.

The Gray Reference

Gray teaches a method of operating an internal combustion engine by inducing a flow of exhaust gas through an EGR cooler 17 that is metered by an EGR valve 14. The flow of exhaust gas is induced by a valve 12' that is disposed upstream of the EGR cooler 17.

Gray, therefore, does *not* describe having *the throttle valve and the EGR valve embodied in a device assembled as a unit into the exhaust system* as stated in independent claims 1, 7, and 15 as amended above. Independent claims 1, 7, and 15 are amended above to include the limitations previously claimed in allowable but objected to dependent claims 5, 11, and 14.

Hence, the applicants respectfully submit that claims 1, 7, and 15, along with all claims that depend therefrom may be passed to allowance.

5. Claims 2 and 8 were rejected under 35 U.S.C. §103(a) given Gray in view of Kawasaki (Publication No. US 2001/00477798 A1). Claims 4 and 10 were rejected under 35 U.S.C. §103(a) given Gray in view of Gorel et al. (U.S. Patent No. 6,301,887). Claim 13 was rejected under 35 U.S.C. §103(a) given Gray in view of Design Choice.

The Examiner's comments and arguments with respect to claims 2, 8, 4, 10, and 13 appear to derive from the assumption that Gray teaches or suggests the claimed subject matter of the instant application. The independent claims as amended above distinguish over the Gray reference. Any combination of the teachings of Gray with the teachings of Kawasaki, Gorel, or a design choice would not yield the invention as

claimed, because none of the references, alone or in combination, teaches having *the throttle valve and the EGR valve embodied in a device assembled as a unit into the exhaust system* as stated in independent claims 1, 7, and 15 as amended above.

Thus, the claims of the present invention are not taught or suggested by Gray, Kawasaki, Gorel, and/or a design choice. Combining these references fails to teach or yield the invention as claimed. The combination of these references fails to teach or suggest all the elements of the claims. Further, one of skill in the art would not be motivated to make such a combination. Therefore, the present invention is not obvious in light of any combination of Gray, Kawasaki, Gorel, and/or a design choice.

Furthermore, claims 2-6, and 8-13 are dependent upon an independent claim that is shown to be allowable. For all these reasons, the dependent claims are themselves allowable.

6. The Applicants cancel claim 14 and incorporate the subject matter thereof in claim 7.

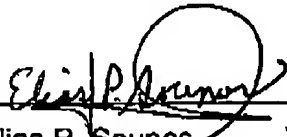
7. No new subject matter is introduced by the amendments to the above claims, specification, and Abstract. One of the above changes to claim 7 corrects a typographical error.

8. The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication may advance the prosecution of the present application. Notice of allowance of claims 1-15 is hereby respectfully requested.

Respectfully submitted,

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